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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,297	02/06/2004	Kentaro Fujibayashi	392.1867	4937

21171 7590 03/10/2006

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EXAMINER

WILLIAMS JR, RONALD E

ART UNIT PAPER NUMBER

2121

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/772,297	<b>Applicant(s)</b> FUJIBAYASHI ET AL.	
	<b>Examiner</b> Ronald E. Williams	<b>Art Unit</b> 2121	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is responsive to application filed on February 6, 2004.
2. Claims 1-5 have been examined.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 is rejected under 35 U.S.C. 102(e) as being anticipated by Weinhofer et al. (**United States Publication Number: 2003/0233906**) hereinafter referred to as Weinhofer.

#### **Regarding Claims 1, Weinhofer discloses:**

A position control device (***see pg 1, col 1, para 0004, lines 1-7***) for controlling a controlled axis in accordance with a command movement, comprising:  
means for calculating the position of the controlled axis (***see Fig 1, element 30-Position Cam***) on the basis of the command movement for the controlled axis; (***see pg 7, col 2, para 0070, lines 4-7***)

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means for calculating the position of a virtual axis (*see pg 6, col 1, para 0056, lines 15-29*) which is assumed to be moving at a speed settled depending on a given function; (*see pg 3, col 1, para 0034, lines 1-5*)

means for storing the calculated position of the controlled axis in association of the calculated position of the virtual axis; (*see pg 2, col 2, para 0032, lines 13-16 and pg 3, col 1, para 0038, lines 3-6*)

and means for driving the controlled axis (*see Figure 2, element 42-Servo Drive*) in a manner such that the controlled axis synchronously follows the virtual axis as a master axis in accordance with the position stored in said means for calculating the position of the controlled axis. (*see pg 3, col 1, para 0035, lines 15-25*)

**Regarding Claim 2, Weinhofer discloses:**

A position control device (*see pg 1, col 1, para 0004, lines 1-7*) for controlling a controlled axis in accordance with a command movement, comprising:

means for acquiring the state of an I/O signal (*see pg 3, col 2, para 0038, lines 5-16*) obtained by an I/O signal control means using a ladder (*see pg 4, col 1, para 044, lines 6-9*);

means for calculating the position of a virtual axis (*see pg 6, col 1, para 0056, lines 15-29*) which is assumed to be moving at a speed settled depending on a given function; (*see pg 3, col 1, para 0034, lines 1-5*)

means for storing the state of the I/O signal obtained by said means for acquiring the state of an I/O signal in association with the position of the virtual axis calculated by said

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means for calculating the position of a virtual axis; (**see pg 2, col 2, para 0032, lines 13-16 and pg 3, col 1, para 0038, lines 3-6**)

and means for carrying out control of the I/O signal (**see Figure 14, element 40-Controller Module**) in accordance with the position of the virtual axis, based on the I/O signal state stored in said means for storing the state of the I/O signal. (**see pg 9, col 1 and col 2, para 0088**)

**Regarding Claim 3:**

Claim 3 recites the same limitations as claims 1 and 2; therefore, claim 3 is rejected under the same rationale as claims 1 and 2 cited above.

**Regarding Claim 4, Weinhofer discloses:**

The position control device (**see pg 1, col 1, para 0004, lines 1-7**) according to claim 2 or 3, wherein said means for carrying out control of the I/O signal includes exclusive control means for preventing the I/O signal stored in said means for storing the state of the I/O signal and an I/O signal (**see pg 3, col 1, para 0036, lines 1-4 and col 2, para 0039, lines 6-27**) using a ladder (**see pg 4, col 1, para 0044, lines 6-9**) from being written doubly.

**Regarding Claim 5, Weinhofer discloses:**

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The position control device (*see pg 1, col 1, para 0004, lines 1-7*) according to claim 2 or 3, which further comprises means for selecting the I/O signal to be stored in said means for storing the state of the I/O signal. (*see pg 7, col 2, para 0068, lines 1-5*)

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald E. Williams whose telephone number is 571 272 2590. The examiner can normally be reached on MWF 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571 272 3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Anthony Knight  
Supervising Patent Examiner  
Tech Center 2100

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